

II. Remarks

Responsive to the outstanding Examiner's Action, applicants have carefully studied the Examiner's comments. Favorable reconsideration of this application is respectfully requested in light of the following detailed discussion.

Claims 1-20 are pending in the application. Claims 1-20 have been rejected. A listing of the pending claims, along with a status indicator of each claim, has not been included as no pending claim is requested to be amended in the present communication. The Examiner has newly cited U.S. Patent No. 6,684,148 to Chess and rejected claims 1-20 as being anticipated by Chess under 35 U.S.C. 102(e).

Independent claim 1 of the application requires "a plurality of driveline components comprising a torque converter, at least one forward clutch, at least one reverse clutch and at least one service brake of a vehicle." Claim 1 also requires "at least one thermal sensor for sensing a fluid input temperature of each of said driveline components" (emphasis added). Claim 1 additionally requires "a computer for providing at least one braking signal to one or more of said driveline components based at least in part upon a determined quantity of braking available in each of said driveline components based at least in part on a calculated thermal condition of each of said driveline components" (emphasis added).

The Chess reference does not teach sensing a fluid input temperature of a torque converter, a forward clutch and a reverse clutch. Instead, the Chess reference merely indicates that a temperature sensor 208 provides a temperature of the transmission fluid in the torque converter 15 or a temperature of the overall transmission 14 (column 2, lines 31-35). Applicants respectfully disagree that the Chess reference teaches "temperature sensors 208" as indicated by the Examiner.

The Chess reference also does not teach determining a quantity of braking available in each of the driveline components based upon, in part, a calculated thermal condition of each of the components, as required by claim 1. At best, the Chess reference only teaches that if the overall transmission temperature is greater than a predetermined value, the CPU reduces the engine speed (column 10, lines 2-4) or that if the overall transmission fluid temperature is less than a predetermined temperature, the torque converter exits an energy control mode and is controlled by alternative logic (column 10, lines 7-9).

In light of the above discussion, claim 1 of the present invention is patentable. Furthermore, claims 2-5 each depend on claim 1, either directly or indirectly, and contain all of the limitations thereof. Therefore, because claim 1 is patentable and claims 2-5 depend on claim 1, claims 2-5 are patentable over the Chess reference.

Independent claim 6 requires “determining a thermal condition of ... a torque converter, at least one forward clutch, at least one reverse clutch and at least one service brake of a vehicle.” As provided above, the Chess reference is silent regarding determining a thermal condition of a torque converter, a forward clutch and a reverse clutch. The Chess reference is also silent regarding the requirement in claim 6 that the thermal condition of at least one service brake be determined. The Chess reference only briefly indicates that a brake sensor 210 on a brake pedal 43 is present (column 2, lines 36-38). The Chess brake sensor, however, is only to provide a signal to the CPU of a brake pedal position, not a service brake thermal condition.

In light of the above discussion, claim 6 of the present invention is patentable. Furthermore, claims 7-19 each depend on claim 6, either directly or indirectly, and contain all of the limitations thereof. Therefore, because claim 6 is patentable and claims 7-19 depend on claim 6, claims 7-19 are patentable over the Chess reference.

Independent claim 20 requires “calculating a thermal condition of ... a torque converter, at least one forward clutch, at least one reverse clutch and at least one service brake of a vehicle.” As discussed above, the Chess reference does not teach calculating a thermal condition of each of these items and certainly not the thermal condition of a service brake. Chess also does not teach calculating a quantity of energy each of the drivelines components can absorb based, in part, on the calculated thermal condition of the components, as required by claim 20. Of course, if Chess does not each calculating a quantity of energy each of the driveline components can absorb, it cannot teach comparing each of the calculated quantities of energy with a plurality of braking profiles, as also required by claim 20.

Regarding the Examiner’s statement in paragraph 4 of page 3 of the Office Action that the Applicants’ arguments with respect to claims 1-20 are moot, applicants respectfully disagree. Applicants’ previous communication to the Examiner consisted of corrections of typographical errors to the claims, correcting antecedent basis issues associated with the claims and adding labels to the figures, as requested by the Examiner. Applicants’ respectfully submit that the modifications to the application in applicants’ previous communication should be entered and are not rendered moot in light of the Office Action dated November 29, 2004.

In light of the remarks above, it is believed the claims are now in condition for allowance and an early Notice of Allowance is respectfully requested.

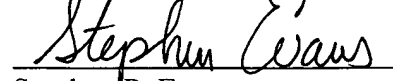
Serial No. 10/677,888

1-16234

6864 HURB

Should the Examiner wish to modify any of the language of the claims, applicant's attorney suggests a telephone interview in order to expedite the prosecution of the application.

Respectfully submitted,

A handwritten signature in cursive script, reading "Stephen Evans", written over a horizontal line.

Stephen P. Evans

Registration No. 47,281

ATTORNEYS

Marshall & Melhorn, LLC
Four SeaGate, Eighth Floor
Toledo, OH 43604
ph: (419) 249-7100
fax: (419) 249-7151